Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of	)	
Advanced Telecommunications	)	
Capability to All Americans in a Reasonable	)	GN Docket No. 04-54
And Timely Fashion, and Possible Steps	)	
To Accelerate Such Deployment	)	
Pursuant to Section 706 of the	)	
Telecommunications Act of 1996	)	

COMMENTS OF COVAD COMMUNICATIONS

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I. Introduction

Covad Communications, by its attorneys, herewith respectfully submits its comments in response to the Commission's Notice of Inquiry seeking comment on "whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."[1] Covad believes that broadband deployment has indeed increased dramatically since the passage of the Telecommunications Act of 1996, when Congress first mandated the Commission to begin conducting its inquiries into the deployment of advanced services under section 706. Covad believes that the rapid pace at which broadband has been deployed since 1996 is largely due to the success of the Commission's policies allowing facilities-based competitors to access incumbent LEC network facilities, in particular the Commission's 1999 *Line Sharing Order*.[2] As demonstrated below, the Commission's rules requiring incumbent LECs to allow competitors to access unbundled loop transmission facilities like line sharing have had a palpable, measurable impact in dramatically increasing the level of broadband subscribership across the nation.

Sadly, despite the historical successes the Commission's unbundling policies have enjoyed in promoting deployment of broadband network facilities, the Commission has recently embarked on the perilous road of closing incumbent networks to competition in the purely speculative hopes of thereby spurring network investment by one service provider – the monopoly incumbent LEC. Specifically, in the Commission's *Triennial*

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[1] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996,* GN Docket No. 04-54, Notice of Inquiry, FCC 04-55 (rel. Mar. 17, 2004) (*NOI*).

[2] *See Deployment Of Wireline Services Offering Advanced Telecommunications Capability*, 14 FCC Rcd. 20912, 20933 (1999) (*Line Sharing Order*).

Review Order, the Commission chose the road of closing competition and consumer choice for unbundled loop facilities such as line sharing and hybrid fiber-copper loops.[3] Indeed, in deciding to phase out and ultimately eliminate line sharing – the most widely deployed means of providing competitive broadband services in the mass market – the Commission enabled incumbent LECs to *remonopolize* mass market broadband services for which facilities-based competition had proven to be wildly successful.[4] In so doing, the Commission opted to ignore the clear lessons of its own history – and to ignore the success of facilities-based competition in generating clear, measurable advances in the deployment of broadband services across the nation.

Not surprisingly, other nations have chosen the opposite course – and continue to beat the United States in the broadband race as a result. As the data discussed below indicate, countries such as Korea and Japan have maintained strong unbundling obligations on their incumbent network operators, and have as a result enjoyed unparalled success in promoting facilities-based broadband deployment. These nations consistently outrank the United States in the per capita deployment of broadband services. Yet, despite the power of such evidence, the Commission continues to consider additional means of further closing incumbent LEC networks to facilities-based competition. For example, the Commission continues to consider whether to expand the *Triennial Review Order*'s government-sanctioned monopoly over fiber loop facilities, by treating hybrid

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[3] *See Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, CC Docket Nos. 01-338, 96-98 and 98-147, FCC 03-36 (rel. Aug. 21, 2003) ("*Triennial Review Order*").

[4] *See Triennial Review Order* at paras. 255-269.

loop facilities like fiber-to-the-home facilities.[5] The Commission continues to consider whether to relieve the Bell companies of even their limited, remaining obligations to unbundle local loop transmission facilities under section 271 of the Act – the same obligations the Commission relied upon in approving Bell company section 271 applications throughout the nation.[6]

Covad hopes it is not too late for the Commission to reexamine the dangerous course upon which it currently embarked. Covad hopes that this *NOI* offers the Commission the opportunity to pause and reflect before it wreaks additional damage on the deployment of advanced services – by continuing the erosion of competitor access to network facilities used to provide facilities-based broadband services.

II. Definition of Advanced Telecommunications Capability

a. Current Definitions Using a 200 kbps Threshold

Covad supports the continued use of the Commission's current definitions of "advanced services," "advanced telecommunications capability," and "high-speed services."[7] These definitions have enabled the Commission to measure and report the deployment of services and facilities that provide upstream and downstream speed of more than 200 kbps (advanced telecommunications capability, and advanced services), as well as services and facilities that provide over 200 kbps in at least one direction (high-speed services).[8] By using 200 kbps as a benchmark, the Commission has remained

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[5] *See* Opposition of Covad Communications to Petitions For Clarification and Partial Reconsideration of Bellsouth Corporation, Surewest Communications, and U.S. Internet Industry Association in WC Docket Nos. 01-338, 96-98 and 98-147 (filed Nov. 6, 2003).

[6] *See Commission Establishes Comment Cycle for New Verizon Petition Requesting Forbearance from Application of Section 271*, Public Notice, CC Docket No. 01-338, FCC 03-263 (rel. Oct. 27, 2003).

[7] *See NOI* at para. 11.

[8] *See id.*

faithful to the Congressional mandate it identified in its previous inquiries under Section 706:

> First, it appeared that Congress intended advanced telecommunications capability to be faster than Basic Rate ISDN service, which operates at a data rate of 144 kbps and was widely available at the time of the 1996 Act. Second, 200 kbps is enough to provide the most popular applications, including web-browsing at the same speed as one can flip the pages of a book.[9]

Thus, using a 200 kbps threshold (measured both in at least one direction as well as both directions) remains faithful to Congress' intent in Section 706 to promote the deployment of broadband services faster than the commonly available legacy services available at the time of the 1996 Act. Moreover, services faster than 200 kbps in speed (such as cable modem and DSL services) are exactly the broadband services whose deployment has exploded since the passage of the 1996 Act. For example, as explained below, ADSL deployment by both incumbent LECs and competitive LECs alike has multiplied many times over since the passage of the 1996 Act. Thus, the Commission's usage of a 200 kbps standard accurately measures the deployment of broadband services commonly used by mass market consumers to replace the legacy services of incumbent LECs available prior to the passage of the 1996 Act, ranging from dial-up connections to ISDN services.

b. Higher Speed Tiers

Notwithstanding the continuing value of the Commission's current 200 kpbs threshold for identifying advanced services and high-speed services, respectively, Covad supports the Commission's expressed interest in measuring the deployment of facilities

[9] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket No. 98-146, Report, 17 FCC Rcd 2844, para. 11 (2002) (*Third Report*).

and services enabling speeds higher than 200 kbps.[10] Covad believes that the collection of more detailed information about services available at higher speed tiers as well as the geographic areas to which such services are being deployed will help provide the Commission a more accurate and precise picture of the state of broadband service deployment across the nation. Covad believes that such information will also help the Commission measure the extent of changing consumer expectations for and adoption of broadband services at different speed tiers. Covad intends to provide further comment on the Commission's proposals to revise its broadband reporting requirements to collect such information in its separate Notice of Proposed Rulemaking on revisions to the Form 477.[11]

Indeed, Covad's own rollout of new services at higher speed tiers reflects these changing dynamics in the race to make broadband available to different market segments. Currently, Covad's retail services include ADSL services offered at maximum download speeds of 1.5 Mbps and 3.0 Mbps, SDSL services at 6 symmetrical speed tiers ranging from 144 kbps to 1.5 Mbps, and dedicated T1 services at 3 speed tiers ranging from 384 kbps to 1.5 Mbps. Furthermore, Covad continues to innovate in its provision of wholesale services to independent Internet Service Providers as well. For example, Covad and partner Speakeasy announced this year their intent to begin providing a 3.0 Mbps/768 kbps ADSL service to Speakeasy's customers, focusing on the needs of power-users such as online gamers.[12] Notably, four months after Covad's announcement,

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[10] *See NOI* at para. 11.

[11] *See Local Telephone Competition and Broadband Reporting, Local Competition and Broadband Reporting*, WC Docket Nos. 04-141, 99-301, Notice of Proposed Rulemaking and Order on Reconsideration, FCC 04-81 (rel. Apr. 16, 2004).

[12] *See* "Covad and Speakeasy Unveil Faster Consumer DSL Service," Press Release, available at http://www.covad.com/companyinfo/pressroom/pr_2004/012804_news.shtml (Jan. 28, 2004).

BellSouth followed with its own announcement of a new 3.0 Mbps ADSL service offering.[13] Thus, Covad's introduction of new speed tiers reflects Covad's continuing attempts to innovate and offer new services to its customers in response to their changing expectations and increased need for greater speeds.

III. Deployment of Advanced Telecommunications Capability

a. The History of Line Sharing Demonstrates Conclusively that Facilities-Based Competition Spurs Advanced Services Deployment.

Covad believes that the deployment of advanced telecommunications capability has been reasonable and timely since the passage of the 1996 Act. As indicated above, Covad believes that the primary factor driving the aggressive rollout of broadband services by incumbent LECs and competitors alike has been the Commission's rules implementing the unbundling provisions of the 1996 Act. Indeed, the Commission's own deployment data show clearly that the primary factor driving the deployment of ADSL services for the last three years, by incumbent phone monopoly and competitors alike, has been the Commission's line sharing rules. When the FCC created the line sharing rules in 1999, its own data showed 115,000 residential ADSL lines in service.[14] Today, as a direct result of the line sharing rules, the FCC reports 7.7 million ADSL lines in service – an increase of nearly seven thousand percent.[15] Moreover, the Commission's latest data confirm the accounts offered by an increasing number of industry observers,

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[13] *See* "BellSouth Introduces 3.0 Mbps Speed to Broadband Portfolio," BellSouth Press Release, Apr. 19, 2004 (available at http://bellsouthcorp.com/newsroom/).

[14] *See Deployment of Advanced Telecommunications Capability: Second Report*, CC Docket No. 98-146, Second Report, FCC 00-290, para. 72 (2000).

[15] *See High-Speed Services for Internet Access:Status as of June 30, 2003*, Industry Analysis and Technology Division of the Wireline Competition Bureau, Federal Communications Commission, at 2 and Table 1 (December 2003).

that after years of slow-rolling by the Bells, ADSL services are finally poised to overtake cable modem deployment:

> Cable companies had a huge head start in the high-speed Internet market, once outselling DSL 2 to 1. But DSL has made gains over the last year, and a recent survey found 26 million cable broadband customers and 20 million DSL customers.[16]

As Petitioner Covad Communications has shown on the record before the Commission, the incumbent phone monopolies willfully slow-rolled their line shared ADSL deployment in order to protect lucrative, legacy monopoly services such as ISDN, T1, and second line telephone service. Thus, years after cable modem services had entered the Internet access marketplace, incumbent phone company ADSL deployment remained pitiful, and was priced at around $69.95. No wonder, then, that residential ADSL deployment stood at only 115,000 lines. Only when the Commission opened the incumbent monopoly networks to data competitors through line sharing did prices drop, availability increase, and residential ADSL deployment begin to take off – today, to the tune of nearly seven thousand percent.[17]

Importantly, the Commission's previous high-speed deployment data confirms the benefits to advanced services deployment created by the competition made possible by line sharing. In June 2003, the Commission recently released data showing that, among advanced services lines,[18] ADSL lines increased by 52% during the last six months of

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[16] *See, e.g.,* "More DSL Than Cable Internet Access Sold," Reuters, May 5, 2004.

[17] *See* Letter from Jason Oxman, Covad Communications, to Marlene Dortch, Federal Communications Commission, in WC 01-338 (dated November 20, 2002), Attachment "Declaration of Steven E. Siwek and Su Sun," at 10-13.

[18] The FCC defines advanced service lines as lines exceeding 200 kilobits per second in both directions. *See High-Speed Services for Internet Access:Status as of December 31, 2002*, at 1, n. 1.

2002, compared to a 22% increase for cable modem service in the same time period.[19] During the preceding six-month period, however, the rate of growth of cable modem (55%) exceeded that of ADSL (35%) among advanced service lines.[20] What changed during the second half of 2002, creating this dramatic upsurge in ADSL line growth? What changed was an ADSL "price war" made possible by competition from line shared ADSL:

> Some of the growth may have been sparked by a price war begun by Covad Communications Group Inc. (COVD), a competitive DSL provider, in June 2002.[21]

Specifically, in June 2002 Petitioner Covad Communications announced the launch of its new TeleSurfer Link product, consumer ADSL service at a previously unheard of price point: $21.95 for the first four months, and $39.95 per month thereafter.[22] The price war sparked by Covad's line shared DSL service led to such an increase in ADSL deployment that, for the full year 2002, among advanced services lines ADSL deployment outstripped cable modem deployment. Specifically, ADSL advanced service lines increased by 105%, while cable modem connections increased by only 90%.[23] Industry reports now suggest that, as a result of this price competition, DSL deployment stands poised to

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[19] *See High-Speed Services for Internet Access:Status as of December 31, 2002*, Industry Analysis and Technology Division of the Wireline Competition Bureau, Federal Communications Commission, at 2 and Table 2 (June 2003).

[20] *See High-Speed Services for Internet Access:Status as of December 31, 2002*, at Table 2.

[21] *See Dow Jones Newswires*, Mark Wigfield, "DSL Internet Connections Gain On Cable At End Of 2002," (June 11, 2003).

[22] *See Press Release,* "Covad Reduces Price of Consumer Broadband to $39.95 per Month with $21.95 Introductory Price," Covad Communications (June 19, 2002).

[23] *See High-Speed Services for Internet Access: Status as of December 31, 2002*, at Table 2.

overtake market share from cable modem deployment – a direct consequence of three years of competition from line sharing.[24]

Today, however, more than one year after the Commission's plan to phase out line sharing was announced, we can see that the Commission's decision is curbing this previous surge in DSL deployment. Specifically, the Commission's latest data show that during the first half of 2003 (the period immediately following the Commission's decision to phase out line sharing), advanced services lines provided by means of ADSL technology increased by 16%, while advanced services lines provided over coaxial cable systems increased at the much higher rate of 43%.[25] Not surprisingly, as has already been widely reported, having been relieved of their obligations to open their networks to broadband competitors, the Bells immediately began reneging on previous promises to expand their rollout of broadband services in the mass market.[26] Thus, the Commission's decisions to phase out line sharing and close off competitive access to hybrid fiber-copper loops is already having immediate consequences, in the slowing of incumbent LEC investment in the rollout of broadband services.

Covad implores the Commission not to ignore this valuable lesson. As the history of line sharing conclusively shows, opening the incumbent LECs' networks to competition increases the deployment of advanced telecommunications capability by incumbent LECs and competitors alike. Opening legacy networks to competition increases consumer choice, increases innovation by numerous competitive players, and

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[24] *See* Goldman Sachs Telecom Weekly, "The Americas – US Spotlight" (Aug. 4, 2003) ("As expected, the market share reversal in 1Q2003 was indeed an inflection point in the DSL vs. cable battle, and DSL is now firmly gaining share against cable.").

[25] *See High-Speed Services for Internet Access: Status as of June 30, 2003*, at Table 2.

[26] *See, e.g.,* "Despite Winning Rules, Bells Shirk DSL Investment Pledge," Wall Street Journal, Feb. 21, 2003.

leads to lower prices for the mass market. While these principles may seem simple enough on their face, the wealth of evidence available to the Commission bears them out in reality. Facilities-based competition works – a valuable lesson for the Commission as it continues to address broadband deployment in future proceedings.

It is not too late for the Commission to protect consumers by providing additional incentive for Bell company deployment of DSL services. The Commission's line sharing phase out, already underway, has drastically reduced both CLEC and ILEC DSL deployment. The Commission's line sharing phase out had two key premises: that ILECs and CLECs would enter into commercial contracts to replace the line sharing regulatory framework with contractual arrangements, and that line splitting via UNE-P/DSL combination would offer consumers a choice of broadband providers even in the absence of line sharing. Subsequent events have undermined both premises. Despite Covad's best efforts and willingness to pay fair rates for line sharing, only Qwest has agreed to commercial terms, after more than a year of negotiations. Covad's contractual arrangement with Qwest provides for a $5 monthly recurring rate at expected volumes, and $35 nonrecurring charge for order provisioning. This contract, at minimum, could be used to define a ceiling for fair, market-based rates for line sharing. Yet all of the other BOCs have declined to date to enter into agreements on similar terms.

In addition, it is clear that line splitting is not at this time a viable alternative to line sharing. The uncertainty surrounding the D.C. Circuit's decision in USTA II has cast a large cloud over line splitting-focused business plans. Moreover, line splitting is nowhere near line sharing in terms of operational readiness and provisioning, thanks to Bell company intransigence in complying with the Commission's line splitting rules.

The rapid phase out of line sharing does not give any incentive to the BOCs to implement line splitting; rather, they will simply wait for October 2004 to capture the broadband marketplace in its entirety.

The Commission must take immediate steps to modify its line sharing phase out to ensure that consumers are not harmed by BOC DSL price increases that will inevitably result from the elimination of CLEC broadband service offerings. Consumers will be denied access to broadband services, and thus access to exciting new VoIP offerings that broadband CLECs like Covad are actually deploying, not just promising to deploy in the future.[27] The Commission must grant the CHOICE coalition petition to modify the line sharing phase out.[28]

b. Competition Enhances Rural Broadband Deployment.

The Commission sought comment on the pace of deployment of advanced telecommunications capability to rural consumers.[29] Covad submits that, once again, the history of line sharing shows that facilities-based competition has dramatically improved the availability of broadband services to consumers living in rural areas of the nation. Last year, the Wireline Competition Bureau presented data to the Commission indicating the increases in rural broadband deployment that had taken place during the previous three years.[30] Of course, that was precisely the time period during which competitive broadband services using line sharing were first made available to consumers. The

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[27] *See* "Covad Signs Agreement to Acquire GoBeam to Accelerate Voice Over Internet Protocol (VoIP) Launch," Covad Press Release, Mar. 3, 2004 (available at http://www.covad.com/companyinfo/pressroom/pr_2004/030304_news.shtml).

[28] *See* Emergency Joint Petition for Stay of the CHOICE Coalition, WC Docket Nos. 01-338, 96-98, 98-147, filed Aug. 27, 2003.

[29] *See NOI* at para. 30.

[30] *See* FCC News Release, "Federal Communications Commission Looks at Data on Growth of Broadband Subscribership in Rural Areas," dated August 6, 2003.

Commission's own data showed the sharp increase in rural ADSL deployment that took place in that three year period. In the six states presented by the Bureau (South Dakota, North Carolina, Kentucky, Wisconsin, Virginia and California), the Commission's data showed that ADSL deployment accelerated dramatically between the end of 1999 and the end of 2002 – a clear result of the Commission's line sharing rules.[31]

Covad's deployment data shows that Covad's rural ADSL deployment accelerated sharply after the Commission's line sharing rules were issued. Specifically, in areas populated by less than 500 people per square mile, Covad's ADSL deployment increased over a thousand fold since the end of 2000 through today, to more than 10,000 rural ADSL lines.[32] More importantly, that data shows that Covad's rural ADSL deployment would continue to accelerate sharply under current trends – in other words, if the Commission had not acted to phase out and ultimately eliminate the availability of line sharing.[33]

IV. Actions To Accelerate Deployment of Advanced Services

Covad submits that, among the various actions the Commission can take to encourage the further deployment of advanced services, none is more important than reversing its policies discouraging facilities-based competition in the provision of broadband services. Specifically, unless reversed, the Commission's policies to phase out and ultimately eliminate line sharing, along with its policies precluding competitors from accessing the broadband capabilities of hybrid fiber-copper loops as UNEs, will greatly undermine the deployment of advanced services by incumbents and competitors

[31] *See id*.

[32] *See* Emergency Joint Petition for Stay of the CHOICE Coalition, WC Docket Nos. 01-338, 96-98, 98-147, filed Aug. 27, 2003, at 54-56 and Attachment G.

[33] *See id.*

alike in the years to come. As the history of line sharing makes clear, facilities-based competition is the only force which has proven itself time and again to stimulate the deployment of broadband services by all market participants. As explained below, the actual experiences of other nations confirm this principle.

a. Market-Opening Lessons from Japan and South Korea

The Commission has sought comment on the experiences of other nations, particularly those that lead the U.S. in the per capita deployment of advanced telecommunications capabilities.[34] As explained above, Covad believes that the history of line sharing in the U.S. demonstrates the clear, measurable benefits of facilities-based competition for the deployment of advanced services to consumers. Lest the Commission believe that the history of line sharing here somehow presents unique or unusual circumstances, however, the Commission should consider the experience of other countries for whom the deployment of advanced services has also been greatly enhanced by the implementation of policies opening incumbent networks to facilities-based competition.

Japan's success in broadband penetration is illustrative. The Japanese equivalent of the 1996 Telecommunications Act was an Amendment to its Telecommunications Business Law. This Amendment subjected the incumbent - NTT (Nippon Telegraph and Telephone) – to mandatory unbundling. NTT was initially "less than enthusiastic" about the new unbundling rules, and attempted several tactics (e.g., setting high entry barriers[35]

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[34] *See NOI* at paras. 43-44.

[35] "The operating companies of NTT tried to hold back unbundling competition by setting high entry barriers. Originally, only 11 local exchanges were opened for co-location, there were limitations on the equipment space and number of lines allowed for unbundlers, and there were serious delays in applications." *On a roll: Japan's success with DSL*, Ovum Research, DSL: Business Models for Exploiting the Local Loop, July 2002.

and needing to "test" DSL equipment for more than a year[36]) to avoid them at first. This scenario will have a familiar ring to it here in the U.S. However, when a competitor – Softbank – brought NTT's resistance strategy to the attention of the government, the government responded by ordering NTT to comply with the unbundling and collocation rules, including rules requiring NTT to provide competitors with access to line sharing. At this point, NTT responded positively to the government's instructions.[37]

Japan's story illustrates that unbundling rules are only as good as the corresponding government enforcement and incumbent compliance allows. Nor is there any question that these combined factors lead to competition. As of the end of 2003, a competitor Softbank - not the incumbent - was the top DSL carrier in Japan: "Over 90% of DSL in the US and in Europe is still operated by telephone companies. In Japan,

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[36] (a) "A few startups tried to begin DSL services, but NTT (Nippon Telegraph and Telephone) delayed the opening of their lines by "testing" the DSL equipment for more than a year." *Three Lessons Americans Can Learn from Japan's Success in Broadband*, RIETI Policy Debate Round 6, February 25, 2003.

(b) "Even so, at first NTT was reluctant to observe this new regulation and deployed stalling measures such as conducting numerous "tests" upon allowing DSL operators to set up their equipment in NTT premises, which forced some operators to delay commencing services by more than a year." *How the "Japanese Miracle" of Broadband Came About*, Glocom Platform, Japanese Institute of Global Communication, Colloquim #43, December 24, 2003.

[37] (a) "Naturally, there were complaints, and in July 2000 the Ministry of Posts and Telecommunications (MPT) ordered NTT to open all local exchanges for co-location, to allow unbundlers access to central offices, and to lift the limitations on rack space." *On a roll: Japan's success with DSL*, Ovum Research, DSL: Business Models for Exploiting the Local Loop, July 2002.

(b) "At first NTT resisted the co-location, but Son urged NTT to open the lines in the governmental IT Strategy Council, where he and Miyazu Jun-ichiro, the president of NTT, were members. Furthermore, the Fair Trade Commission of Japan accused NTT-East of unfair treatment of DSL carriers, which was a shocking event for NTT, a half-national company. So it lessened its resistance and opened its facilities nationwide." *Three Lessons Americans Can Learn from Japan's Success in Broadband*, RIETI Policy Debate Round 6, February 25, 2003.

(c) "Realizing the situation, the Fair Trade Commission issued an admonition to NTT concerning DSL installations in 2001, and Masayoshi Son, president of Softbank, made strong requests at the government's IT Strategic Headquarter's meetings that NTT open its network. NTT then finally allowed their competitors into their facilities." *How the "Japanese Miracle" of Broadband Came About*, Glocom Platform, Japanese Institute of Global Communication, Colloquim #43, December 24, 2003.

however, the top DSL carrier is Softbank Corp. with over 30% of the market, while the share of the entire NTT group combined is under 40%.[38]

The three main components for Japan's success are, again, the combination of stringent unbundling rules imposed by the government, incumbent compliance with these rules, and the competition that is allowed to flourish as a result:

> …[f]rom Japan's experience, we can say **that unbundling facilitates investment as a whole if it is enforced adequately**. Unbundling invites entry of new competitors and, eventually, increases incumbent's investment. Incumbents would not cannibalize their telephone business unless competitors threaten them to do so.[39]

Japan also exemplifies how cost-based wholesale prices to competitors – in addition to rules requiring nondiscriminatory access – can do nothing but benefit a country's consumers in the end:

> In December 2000, the charge for unbundled line sharing was reduced from ¥800 ($6.50) to ¥187 ($1.50) per month - the lowest in the world. Further measures reduced co-location costs, allowed for self-installation of equipment by unbundlers, shortened provisioning periods and prevented NTT from accessing competitive information. NTT was also obliged to unbundle backhaul to its local exchanges over its fibre network and to provide the necessary information to support competitors in getting access. NTT is obliged to provide facilities to competitors under the same terms and conditions as it provides to its own divisions. Access to NTT's equipment remains inexpensive and charges are among the lowest in the world. Japan was one of the first countries to introduce line sharing.[40]

The benefits to consumers are clear:

> Differentiation and choice of provider is a huge driver of market growth. New aggressively priced DSL products from operators such as Softbank, reselling the Yahoo! Japan product, have helped stimulate demand. Retail

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[38] *Id.*

[39] *Three Lessons Americans Can Learn from Japan's Success in Broadband*, RIETI Policy Debate Round 6, February 25, 2003, (emphasis added).

[40] *On a roll: Japan's success with DSL*, Ovum Research, DSL: Business Models for Exploiting the Local Loop, July 2002.

> DSL prices remain the lowest in the world, with prices averaging around ¥2,300 ($18) per month.[41]

In the case of South Korea, the government committed early on to making broadband proliferation a top priority.[42] In support of this, it invested its own money in infrastructure. It also gave $400 million in loans to *competing* broadband carriers.[43] This later fact is even more striking when one considers that one of the top competitors (Korea Telecom) is 40% government-owned.[44] So strong was the government's commitment to expanding broadband and encouraging competition that it encouraged the formation of another company (Hanero) to compete with Korea Telecom,[45] opening Korea Telecom's network with requirements for local loop unbundling, including sharing of the local loop.[46] The result has been thriving competition in the broadband market, with three main suppliers[47], and rock-bottom prices (as low as $25 a month[48]) for consumers. The government's commitment to bringing broadband to every home in South Korea, and the low prices that encourage consumers to sign up have paid off: "At the end of June 2003,

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[41] *Id.*

[42] "Three years ago, a policy statement by the Ministry of Information and Communication made a digital infrastructure a high priority, reflecting the wishes of President Kim Dae Jung." *Seoul's Strong Hand Sets Pace on Web*, International Herald Tribune Online, November 26, 2001.

[43] *Id.*

[44] *Id.*

[45] *Id.*

[46] *See* "Developments in Local Loop Unbundling," Organisation for Economic Cooperation and Development, Working Party on Telecommunications and Information Services Policies, Sept. 10, 2003, at 49 (available at http://www.oecd.org/dataoecd/25/24/6869228.pdf).

47 "Major suppliers include Korea Telecom 4.58M (DSL), Hanaro Telecom 2.86M (mostly DSL, some cable modem), and ThruNet 1.3M (cable)." *Korea Broadband,* PDS Consulting Short Paper, Version 12 June 2003.

[48] *Seoul's Strong Hand Sets Pace on Web*, International Herald Tribune Online, November 26, 2001.

South Korea ranked third in the world by the total number of DSL lines and first in the world in terms of DSL penetration, with 14.27 DSL lines per 100 population."[49]

The United Kingdom presents an interesting contrary view. In the U.K, the government voted to protect British Telecom from unbundling obligations until 2000.[50] As a result, there was no wire line competition and broadband penetration rates in the U.K. are among the worst in Western Europe. In fact, the U.K has worse penetration rates than every Western Eurpoean country except Italy and Luxemborg.[51]

The experiences of South Korea, Japan and the U.K. respectively show that the broadband penetration rates in those countries stem at least in part from more, not less, government market opening regulation. These lessons present the Commission with a clear choice. The Commission can choose to emulate the world leaders in broadband penetration, Japan and South Korea, by ensuring that incumbent networks are truly open to facilities-based competition. To that end, the Commission should reverse its ill-conceived decision to phase out and eliminate the line sharing UNE, and to preclude competitors from accessing the broadband capabilities of hybrid fiber copper loops as UNEs. Or else the Commission can continue down the road that nations like the United Kingdom have already traveled and long since abandoned – relegating the U.S. to playing catch-up with the rest of the world in the broadband race in years to come.

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[49] *South Korea*, Korea Broadband Overview, Point Topic, October 20, 2003.

[50] *See* "Developments in Local Loop Unbundling," Organisation for Economic Cooperation and Development, Working Party on Telecommunications and Information Services Policies, Sept. 10, 2003, at 53 (available at http://www.oecd.org/dataoecd/25/24/6869228.pdf).

[51] *See* "Broadband access in OECD countries per 100 inhabitants, June 2003," Organisation for Economic Cooperation and Development, Nov. 18, 2003 (available at http://www.oecd.org/document/33/0,2340,en_2649_34225_19503969_1_1_1_1,00.html).

V. Conclusion

Covad respectfully submits that facilities-based competition works, and has served as the primary factor driving the deployment of broadband services by incumbents and competitors alike. The facilities-based competition made possible by unbundling the incumbent LECs' local loop facilities enables service innovation and price-lowering competition that would not otherwise occur, factors that in turn drive consumer uptake of broadband services. Covad hopes that this *NOI* provides the Commission an opportunity to remind itself of these seemingly simple principles, and the wealth of evidence that bears them out. Otherwise, Covad fears that the Commission will leave the U.S. traveling down the road of less competition, rather than more – and leave the U.S. far behind the rest of the world in the race to deploy advanced telecommunications capabilities.

Respectfully submitted,

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